

Takemoto, K., Kataoka, M., and Suzuki, S.
UTILISATION OF BY-PRODUCT GYPSUM FOR
PORTLAND CEMENT, 25p. 4 refs.

Order from OTS or ETC \$2.37

62-26044

Trans. of Sekkō to Sekkai (Japan) 1958, v. 1,
p. 162i-1636.

DESCRIPTORS: *Cements, *Gypsum, Chemical
impurities, *Hardening, Phosphoric acid, Fluorine.

62-26044

I. Takemoto, K.
II. Kataoka, M.
III. Suzuki, S.

Office of Technical Services

Study of Gypsum Obtained as a By-product
Phosphoric Acid Process. Part 4. Crystal
Growth in Two-step Phosphate Decom-
position, by T. Yamada, 10 pp.

JAPANESE, per, Sekko to Sekkai, No 40,
1959, pp 337-342.

ATS JJ-3901

Sci-Chem
Dec 63

244,570

Studies on Phosphate Gypsum. Part 5. De-
composition Conditions and Form of Gypsum,
by T. Imada, 8 pp.

JAPANESE, per, Sakko to Sekkai, No 42,
1959, pp 465-469.

ATS JJ-3905

Sci-Chem
Dec 63

244.571

Kasai, J. and Nakahara, M.
LARGE CRYSTALS OF $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ FROM CaCl_2
AND Na_2SO_4 . [1963] 9p.
Order from ATS \$11.25

ATS-73Q69J

Trans. of Sekko to Sekkai (Japan) 1963, no. 62,
p. 21-26.

DESCRIPTORS: *Calcium compounds, *Sulfates,
*Hydrates, *Gypsum, *Crystals, Synthesis (Chemistry),
Chlorides, Sodium compounds.

(Physics--Solid State, TT, v. 10, no. 6)

63-17774

I. Kasai, J.
II. Nakahara, M.
III. ATS-73Q69J
IV. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS JJ-3902

Office of Technical Services

The Treatment of Gypsum with Resins, PT I
Effect of Mixing with Urea-Formalin Resins
on Gypsum, by T. Ito, Y. Utsumi, 11pp
JAPANESE, per, Sekko to Sekkai, 1963, No 64,
pp 120-125
ATS-45R79J

Sci - Mat
June 67

127,445

The Treatment of Gypsum with Resins. Part II.
Effect of Mixing with Melamine Resins on Gypsum,
by T. Ito and Y. Utsuni,
JAPANESE, per, Sekko to Sekkai, No 65, 1963,
pp 155-157.
ATS 46R79J

Sept 66

311,237

Properties of Silica Affecting Expanding Gypsum
Molds, by I. Teraoka.

JAPANESE, per, Sekkei to Sekkai No, Vol 70, 1964,
pp 96-99.

ATS-JE-222

Sci-Materials
Mar 70

403,889

(NY-4989)

Nine Theses of Marxism and Brief Explanations
of Them, by Asmara Hadi, 22 pp.

INDONESIAN, booklet, Sembilan Tesis Marxisme
dan Penjelasan Singkatnja, 1960, pp 1-35.

JPRS 5724

PE - Indonesia

Pol

131,737

Nov 60

61-20742

DIAGNOSIS OF BEARING POWER OF DAMAGED RE-
INFORCED CONCRETE BUILDINGS. [1961] 10p.
Order from SLA \$1.10

61-20742

Trans. of [Semento Gijutsu Nempo] (Japan) 1955 [v. 9]
no. 41, p. 25-28 and 46-49.

DESCRIPTORS: *Buildings, *Reinforced concrete,
Structures, *Fires, Combustion, Temperature, Heat,
Water, Mechanical properties.

Contents:

Evaluation of fire damage

Fire-damage of reinforced concrete and diagnosis of
damaged buildings.

(Engineering--Civil, TT, v. 8, no. 3)

Office of Technical Services

Study on the Amorphous Calcium Hydroxide, by
Saburo Takashima, 10 p.

JAPANESE, por, Semento Gijutsu Nenpo, 1956,
Vol X, pp 51-56.

59-17896

Sci
Mar 60
Vol 2, No 11

109,610

Elongation of Rock Due to Wetting, by Hideo
Mishidoka, Yu. Harada, 6 pp.

JAPANESE, par, Semento Gijutsu H. Harada
Vol. XII, 1958, pp 309-311.

SIA 60-18117

Sci.

Jun 62

20.3, 2.38

Quantitative Determination of Calcium Sulphate of
Various Forms Contained in Portland Cement by
Differential Thermal Analysis, by H. Sato, H. Kanaga.
JAPANESE, per, Semento Gijutsu Nempo, Vol. 10, 1962,
pp 70-77
INDIA

Sci -
July 1967

334, 610

Size Distribution of Air Voids and the Durability
of Air-entrained Mortar and Concrete, by T. Soda.
JAPANESE, per, Semento Konkurito, No 163,
1960, pp 22-28.
ATS-JE-223

Sci-Materials
Mar 70

403,890

Enactment of the Public Peace Maintenance Law.
UNCLASSIFIED

JAPANESE, pamphlet, Sen Kyuhyakugo, Jurokunen No
Indo Shina, Mar 1957, pp 11-13.

500th MI Gp Tr 96257

FE - Indochina

Pol

Feb 58

58,368

Control of Overseas Chinese. UNCLASSIFIED

JAPANESE, pamphlet, Sen Kyuhyakugo Jurokunen No
Indo Shina, Mar 1957, pp 15-20.

500th MI Gr Tr 96257

FE - Indochina

Pol

Feb 58

58,369

Unstable Political Situation. UNCLASSIFIED

JAPANESE, pamphlet, Sen Kyuhyakugojurokunen No Indo
Shina, Mar 1957, pp74-76.

500th MI Gp Tr 96257

FE - Indochina

58, 376

Pol

Feb 58

Oppression of Anti-NGO Factions. UNCLASSIFIED

JAPANESE, pamphlet, Sen Kyuhyakugo Jurokunon Mo
Indo Shina, Mar 1957, pp 3-6. 7

500th MI Gp Tr 96257

FE - Indochina

Pol

Feb 56

58,367

Propaganda Handbook, Vol II.

book
JAPANESE, Yamato no Tenshi, 1 Jul 1956, publ
by Propaganda and Education Dept of Japan
Communist Party Central Committee, 344 pp.
(HDC Mex 58).

500th MI Sv Op Tr 95573

FE - Japan

Pol - Communist Party

Nov 57

54, 954

Propaganda Handbook.

Full. 12

JAPANESE, bk, ~~Senden no Tshiki~~ [J], Vol I, May
1957. (KDC 30 Oct 57)

500th MI Sv Gp
Tr 9:153

FE - Japan
Fol
Aug 57

52,183

Chromatographic Studies. Part III. Mucosin in
Wood Cellulose and Some Pulps for High Grade
Papers, by H. Sobue, K. Matsunishi.
JAPANESE, par, Sen-i-Gakkaishi, Vol 8, 1952,
pp 79-81.
REC-69-12827-07C

Sci-Chem
Sept 69

391,152

Studies on Construction of Fabrics and their
Manufacturing Process. Part III. Effect of
Twist on Yarn Characteristics. Part IV,
Factors in Weaving of Threads, by H. Matsuda.
JAPANESE, per, Sen-i-Gakkaishi, Vol 9, No 8,
1953, pp 405-421,
NTC-71-11682-11E

Feb 72

Copolymers of Acrylonitrile With Isobutylene and
That With Methacrylonitrile, by Seizo Otsuura,
Takao Yamashita, 6 p.

JAPANESE, per, Sen-i Gakkaishi, 1953, Vol IX, No 9,
pp 446-448.

SLA 59-17083

Sci
Feb 60
Vol 2, No 9

107042

Crease Resistance of Cloth. Part IV:
Influence of Yarn Twist on Crease Resistance
of Fabric, by S. Ikeda.
JAPANESE, per, Sen-i-Gakkaishi, Vol 11, No 1,
1955, pp 28-31.
NTC-71-11683-11E

Feb 72.

Negishi, Michiharu and Sekiguchi, Ichiro.
VAPOR PHASE SYNTHESIS OF POLYVINYL CYANO-
ETHYL ETHER. Rept. 1 of Studies on Polyvinyl Cyano-
ethyl Ether. [1962] 17p. 18 refs.
Order from SLA \$1.60

62-14961

Trans. of Sen-i Gakkaishi (Japan) 1956, v. 12, no. 7,
p. 479-486.

DESCRIPTORS: Polymers, *Vinyl radicals, *Cyanide
radicals, *Ethyl ethers, Synthesis, Vapors, Vinyl
alcohols, Acrylonitriles, Catalysis, Reaction kinetics,
Alcohols.

The synthesis of polyvinyl cyanoethyl ether by the re-
action of polyvinyl alcohol with acrylonitrile vapour,
in the presence of NaOH catalyst was studied, including
effects of the pretreat-swelling by catalyst (9-5 hrs.),
amount of water and catalyst (H₂O/PVA wt. 0.1-2.5 g/ml)
(Chemistry-Organic, TT, v. 9, no. 1) (over)

62-14961

I. Negishi, M.
II. Sekiguchi, I.
III. Title: Studies...

Office of Technical Services

Studies on Photodecomposition of Polyvinylchloride.
I. Photodecomposition of PVC Fibre, by I. Tatsuya,
O. Yoshinaka, 13 p.

JAPANESE, per, ~~Sen-I Gokkashu~~ Sen-I Gokkashu. Vol XII No 11,
1956, pp 823-827.

SLA 58-49

Sci

Natl Sci Council 11-59

Jul 59

92,707

61-16772

Sakurada, Ichiro, Sakaguchi, Yasuyoshi, and Nagai, Kazuhiro.
 LIQUID PHASE FIBROUS ACETYLATION OF CELLULOSE: III, FIBROUS ACETYLATION OF VISCOSE RAYON AFTER DISPLACEMENT OF INHIBITION WATER WITH SOLVENT VAPOR; IV, ACETYLATION OF COTTON YARN WITH SULFURIC ACID CATALYST; V, ACETYLATION OF COTTON YARN WITH PERCHLORIC ACID CATALYST. [1961] [39]p. 18 refs. Order from SLA \$3.60 61-16772

Trans. of [Sen-i Gakkaishi] (Japan) 1957, v. 13, p. 292-304.

DESCRIPTORS: *Cellulose, *Acetylation, *Rayon, *Cotton, *Sulfuric acid, Perchloric acid, Catalysts.

Liquid phase fibrous acetylation of cotton yarn was performed with perchloric acid catalyst. Under suitable conditions, acetylation goes forward smoothly and high-acetylated cotton yarn is easily obtainable. In this (Materials--Textiles, TT, v. 6, no. 5) (over)

- I. Sakurada, I.
- II. Sakaguchi, Y.
- III. Nagai, K.
- IV. Title: Fibrous...
- V. Title: Acetylation of Cotton Yarn with Sulfuric...
- VI. Title: Acetylation of Cotton Yarn with Perchloric...

180496

Office of Technical Services

Diffusion of Acid Dyes in a Polyamide
Fiber, by Toru Shimizu, Uehiro Sirooka,
17 pp.

JAPANESE, per, Sen-i Gakkaishi, Vol XIII,
No 8, 1957, pp 553-559.

SLA 60-18456

Sci.
Vol. IV, No 1.1
Jun 62

199, 305

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Studies of the Thermal Properties of Fibrous
Materials. I. On the Heat Conductivities of
Fibrous Materials, 22 pp.

JAPANESE, per, Sen-i-Gakkaishi, Vol XIII,
1957, pp 801-807.

AEC BGL-1-267.

Sci - Phys

Oct 59

99,545

Studies on Polyvinylchloride. Report XXVIII.
Specific Gravity and Crystallinity of Pure
PVC-Fiber, by Tatsuya Imoto, Tutsaku M Makai,
15 pp.

JAPANESE, per, Sen-i Gakkaishi, Vol XIII,
1957, pp 808-812.

AEC BCL-T-264

SLA 57-10:00

Sci - Chem

Sep 59

97,543

Studies on Polyvinylchloride. Report XXIX.
Maximum Point in the Shrinkage Curve of the
PVC-Fiber, 17 pp.

JAPANESE, per, Sen-i Gakkaishi, Vol XIII,
1957, pp 813-16.

AEC SCL-T-265

Scl - Chem

Sep 59

97,546

Okamura, Isao.

ON THE DRAWING OF ACRYLONITRILE-VINYLI-
DENE CHLORIDE COPOLYMER FIBERS. Pt. 1 of
Studies on Acrylic Fibers. [1961] [19]p. 6 refs.
Order from SLA \$1.60 61-16583

Trans. of Sen-i Gakkaishi (Japan) 1957, v. 13, no. 12
p. 861-865.

DESCRIPTORS: *Synthetic fibers. Tensile properties.
Processing. Acetones. Temperature.

The drawing of fibers made from the acetone-soluble
copolymer, 40% acrylonitrile - 60% vinylidene chloride,
was studied. The tensile strength of the fibers after
drawing was greater when the residual acetone quantity
was small, and less when the acetone residue was great.
The second transition temperature of the polymer was
about 70°C. The drawing tension which gave greatest
strength was 2 to 3×10^2 grams/denier and the optimum
drawing temperature was 120 to 140°C. Calcium chlo-
(Materials--Textiles, TT, v. 6, no. 7) (over)

61-16583

I. Okamura, 1
II. Title: Studies ...

134100

Office of Technical Services

Studies of Wet Strength Papers, I. Physical
Properties of Heat-Treated Paper, H. I. L. L. L.
7 p.

JANUARY, per, Son-i Gukhinski, 1958, Vol. 2,
pp 92-95.

AMS-181295

Sci
Dec 59
Vol 2, No 6

102-101

61-16582

Okamura, Isao.

HEAT TREATMENT OF ACRYLONITRILE-VINYLI-
DENE CHLORIDE COPOLYMER FIBER (AND) MECH-
ANISM OF DRAWING AND HEAT TREATMENT OF
ACRYLONITRILE-VINYLDENE CHLORIDE COPOL-
YMER FIBERS. Pt. 2-3 of Studies on Acrylic Fiber.
[1961] [20]p. 3 refs.

Order from SLA \$1.60

61-16582

Trans. of [Sen-i Gakkaishi] (Japan) 1958, v. 14, no. 3,
p. 133-141.

DESCRIPTORS: Polymers, *Acrylonitriles, *Synthetic
fibers, Heat treatment, Processing, Chlorides.

(Materials--Textiles, TT, v. 6, no. 9)

- I. Okamura, I.
- II. Title: Mechanism ...
- III. Title: Studies ...

5389

Office of Technical Services

61-12090

Ueda, H.
A SIMPLE METHOD FOR OBTAINING THE DIFFU-
SION COEFFICIENTS OF DYES IN FIBERS. [1960]
5p.
Order from ATS \$9.50

ATS-02M45J

Trans. of Sen-i Gakkaishi (Japan) 1958, v. 14, no. 6,
p. 481-483.

143,097

1. Eyes--Diffusion
2. Synthetic fibers--Processing
- I. Ueda, H.
- II. ATS-02M45J
- III. Associated Technical
Services, Inc., East
Orange, N. J.

ATS/TJ-2977

Office of Technical Services

(Materials--Textiles, TT, v. 5, no. 1)

Effect of Cold Drawing on the Dyeing
Properties, by Toru Shimizu, Heihiro
Miyacka, 15 pp.

JAPANESE, per, Sen-i Gakkaishi, Vol XIV,
No 8, 1958, pp 557-562.

SLA 60-18455

Sci
Vol IV, No 11
Jan 62

199,306

Sakaguchi, Yasuyoshi and Ishizu, Inamuro.
PREPARATION OF WATER-SOLUBLE DERIVATIVES
OF STARCH BY CARBOXYMETHYLATION. [1961][11]p.
8 refs.
Order from SLA \$1.60

61-16539

Trans. of Sen-i Gakkaishi (Japan) 1958, v. 14, no. 11,
p. 814-817.

DESCRIPTORS: *Starches, Chloroacetic acids, Chem-
ical reactions, Textiles.

Starch was reacted with monochloroacetic acid (CA) in
the presence of NaOH. The effect of the nature of
starches, composition of reaction mixtures, reaction
temperature and time were examined, then it was
observed that water soluble derivatives could be ob-
tained using about 10g CA and about 10g NaOH for 100g
starch. Products with etherification degree higher
than about 0.1mole/base mole were soluble in cold
water. Water soluble derivatives were also obtained
(Chemistry--Organic, TT, v. 6, no. 5) (over)

61-16539

1. Title: Carboxymethylation
- I. Sakaguchi, Y.
- II. Ishizu, I.

180470

Office of Technical Services

Sakaguchi, Yasuyoshi.

PREPARATION OF WATER-SOLUBLE DERIVATIVES
OF STARCH BY REACTION WITH ACRYLONITRILE.

[1961] 9p. 14 refs.

Order from SLA \$1.10

61-16538

Trans. of Sen-i Gakkaishi (Japan) 1958, v. 14, no. 11,
p. 818-821.

DESCRIPTORS: *Starches, *Acrylonitriles, Chemical
reactions, *Ethers, Synthesis.

Starches were reacted with acrylonitrile in the co-
presence of alkali. At this time, cyanoethyl etherifica-
tion and saponification reaction of this ether to car-
boxyethyl ether occurred. Under optimum conditions, a
water-soluble ether could be obtained by using the
nitrile and NaOH each in quantity of about 10% of the
starch. The approximate composition necessary to ob-
taining a water-soluble product was, a degree of car-
(Chemistry--Organic, TT, v. 6, no. 6) (over)

61-16538

I. Sakaguchi, Y.

176552

Office of Technical Services

Nakai, Akiyoshi.
BEHAVIOR OF MODEL FILAMENTS DURING GELATINATION AND REGENERATION IN RELATION TO THE STRUCTURE OF THEIR PRIMARY CELLULOSE XANTHATE GELS. [1961] [10]p. 6 refs.
Order from SLA \$1.10

61-16579

Trans. of [Sen-i Gakkaishi] (Japan) 1959, v. 15, no. 1, p. 9-12.

DESCRIPTORS: *Cellulose, *Gels, Analysis, Physical properties, *Cellulose chemistry, Coagulation, Filaments, Fibers, Regeneration.

The physical properties and behaviours of the isotropic xanthate filaments during their gelatination, conversion to cellulose, and drying, were studied, in relation to the means by which coagulation is brought about (coagulant, temperature, degree of ripeness of viscose). The following are examined: shrinkage behaviours during each process, diffusion rate of regenerating solution. (Materials--Textiles, TT, v. 6, no. 5) (over)

61-16579

1. Title: Gelatination
1. Nakai, A.

180478

Office of Technical Services

Nakai, Akiyoshi.

ON DETERMINING THE CRYSTALLINITY OF CELLULOSE FIBERS ON WHICH COHESIVE STRUCTURES ARE NOT SET IN STABLE STATE. [1961] [9]p.

6 refs.

Order from S.L.A \$1.10

61-16578

Trans. of [Sen-i Gakkaishi] (Japan) 1959, v. 15, no. 1, p. 13-15.

DESCRIPTORS: *Cellulose, *Rayon fibers, Crystallization, Hydrolysis.

By measuring the crystallinity of several viscose rayon fibers whose stability of cohesive structure varies radically by the acid hydrolysis method and iodine absorption method the feasibility of this method was established. During acid hydrolysis the recrystallization of the fibres depended greatly on the stability of the cohesive structure.

(Materials--Textiles, TT, v. 6, no. 3)

61-16578

I. Nakai, A.

180477

Office of Technical Services

61-16581

Nakai, Akiyoshi.

STUDIES ON MODEL CELLULOSE GELS COAGU-
LATED BY TWO-BATH TREATMENT FROM VIS-
COSE. Rept. no. 1 of Coagulation Effect on Structures
of Regenerated Cellulose. [1961] [21] p. 15 refs.
Order from SLA \$2.60 61-16581

Trans. of Sen-i Gakkaishi (Japan) 1959, v. 15, no. 2,
p. 90-94.

DESCRIPTORS: *Cellulose, *Gels, Analysis, *Cellu-
lose chemistry, Coagulation.

The present examination refers to cellulose gels co-
agulated freely by the procedure by which the formation
process is broken up into individual phases: (1) gelatin-
ation of viscose, and (2) regeneration of this xanthate
gel to cellulose itself. Fine structures of both fresh
and dry gels, such as equilibrium absorption of dye,
accessibility and lateral-order distribution, were in-
vestigated with regard to various conditions of Na_2SO_4
(Materials--Textiles, TT, v. 6, no. 5) (over)

I. Nakai, A.
II. Title: Coagulation...

160480

Office of Technical Services

Takahashi, Masao.
SOME MELT SPINNING CONDITIONS. [Rept. no.] 3
of Studies on the Manufacture of Polyethylene Fiber.
[1961] 14p. 3 refs.
Order from SLA \$1.60 61-16571

Trans. of [Sen-i Gakkaishi] (Japan) 1959, v. 15, no. 4,
p. 254-259.

DESCRIPTORS: *Synthetic fibers, Production, *Ethyl-
enes, Polymers, Fibers, Textiles.

By using the "candle" melt spinning apparatus, the
effects of various spinning conditions upon the state of
spinning were studied. At excessively high tempera-
tures, the upper limit of the draft (where the spinning
is satisfactory) became smaller due to the thermal
degradation of the sample. The smaller the average
molecular weight (M_p), the lower was the temperature
at which the upper limit of draft (at high temperatures)
started to decline and the greater was the draft at low
(Materials--Textiles, TT, v. 6, no. 5) (over)

61-16571

Title: Spinning
1. Takahashi, M.
I. Title: Studies...

180470

Office of Technical Services

61-16569

Takahashi, Masao.

RELATION BETWEEN SOME SPINNING CONDITIONS
AND PROPERTIES OF UNDRAWN FILAMENTS. Rept.
no. 7 of Studies on the Manufacture of Polyethylene
Fiber. [1961] [17]p. 4 refs.
Order from SLA \$1.60

61-16569

Trans. of Sen-i Gakkaishi (Japan) 1959, v. 15, no. 5,
p. 368-372.

DESCRIPTORS: *Synthetic fibers, Production, Physical
properties. *Ethylene, Polymers, Fibers, Textiles.

The effects of the various melt spinning conditions such
as linear velocity in capillary, draft (or winding speed),
cooling path distance and temperature of chilled bath on
some properties of undrawn filaments were investi-
gated. The increase of linear velocity in capillary and
draft produces orientation of molecular chains which
results in the indistinctness of yield point, an increase
of tensile strength and a decrease of elongation of the
(Materials--Textiles, TT, v. 6, no. 5) (over)

- I. Title: Spinning
- I. Takahashi, M.
- II. Title: Studies...

180470

Office of Technical Services

The Course of Fiber Formation From Viscose;
Mechanism of Coagulation, by A. Nakai,
13 pp.

JAPANESE, per, Sen-i Gakkaishi, Vol XV,
1959, pp 527-531.

SLA 60-10150

Sci
Mar 62
Vol IV, No 2

188,838

Study of Spinning Mechanisms of Viscose I. Internal
Structure of Viscose, by Naoki Kunita, 8 p.

JAPANESE, per, Sen-i Gakkaishi, 1959, Vol XV,
pp 532-536.

SLA 60-1014)

Sci
Apr 60
Vol XII, No 3

112,012

The Improvement on Soil-Resistance of the
Resin-Finished Fabrics. Part I. Combination
Effects of Vinyl-Polymers With Dimethyl-
Ethylene-Urea, by T. Matsukawa.
JAPANESE, per, Sen-i-Gakkaishi, Vol 15, No7,
1959, pp 570-575.
NTC-71-11681-11E

Feb 72

Nakai, Akiyoshi.
THE COURSE OF FIBER FORMATION FROM VIS-
COSE: MECHANISM OF SKIN-CORE DIFFERENTIA-
TION. [1961] [34]p. 24 refs.
Order from SLA \$3. 60

61-16580

Trans. of Sen-i Gakkaishi (Japan) 1959, v. 15, no. 9,
p. 708-715.

DESCRIPTORS: *Synthetic fibers, Production, *Cellu-
lose, Processing, Coagulation, Fibers.

Cross-sectional sections of filaments which had been
spun out into several types of coagulation baths were
observed under polarized light, and their cross-
sectional orientative property was sought. From in-
formation thus obtained, we have explained the com-
pressive orientation effect and stretching orientation
effect which accompany contraction in the course of
viscose fiber formation, in their relationship with the
coagulation mechanism. We have explained the mecha-
(Materials--Textiles, TT, v. 6, no. 5) (over)

61-16580

I. Nakai, A.

180479

Office of Technical Services

Measurements of the Hysteresis Loss of
Fiber Materials (Textiles). 2. Resilience
Meter of the Counter Tube Type, by
K. Shirakashi, K. Ishikawa, 7 pp.

JAPANESE, per, Sen i Gakkaishi, Vol. XV,
1959, pp 863-867.

ATS-013417

Sci

187, 737

10 Mar 62

Vol 4, No 4

61-16517

Takahashi, Masao and Watanabe, Masamoto.
RELATION BETWEEN COAGULATING FORCES OF
SPINNING BATHS AND PROPERTIES OF FIBERS.
Rept. no. 7 of Studies on Acrylic Fiber. [1961] 15p.
Order from SLA \$1.60

I. Takahashi, M.
II. Watanabe, M.
III. Title: Studies...

Trans. of Sen-i Gakkaishi (Japan) 1959, v. 15, no. 12,
p. 951-959.

Another translation is available from SLA mi\$2.40,
pb\$3.30 as 60-18433 [1960] 15p.

170540

DESCRIPTORS: *Synthetic fibers, Coagulation,
Production

For abstract see Technical Translations 4: 632, 1960.

See also 61-16524, 61-16582, 61-16583

Office of Technical Services

(Materials--Textiles, TT, v. 6, no. 6)

Hysteresis and Related Elastic
Properties of Textiles III. Some
Measurements on Tire Cords, by K.
Shirakashi, et al, 13 pp.

JAPANESE, per, Sen-i Gakkaishi, Vol IV,
No 12, 1959, pp 985-991.

SLA 60-18454

Sci.
Vol IV, No 11
Jun 62

199, 307

The Improvement on Soil-Resistance of the
Resin Finished Fabrics. Part II. Combination
Effects of High Polymer Electrolytes With
Dimethylol Ethylene Urea, by I. Matsukawa.
JAPANESE, per, Sen-i-Gakkaishi, Vol 15, No 12,
1959, pp 1001-1006.
NTC-71-11684-11E

Feb 72

61-16525

Takahashi, Masao and Watanabe, Masamoto.
EFFECTS OF THE TEMPERATURE OF COAGU-
LATION BATH ON THE WET-SPINNING OF DIM-
ETHYL FORMAMIDE-GLYCERIN SYSTEM. Rept.
no. 8 of Studies on Acrylic Fiber. [1961] 19p. 20 refs.
Order from SLA \$1.60 61-16525

- I. Title: Spinning
- I. Takahashi, M.
- II. Watanabe, M.
- III. Title: Studies...

Trans. of Sen-i Gakkaishi (Japan) 1960, v. 16, no. 1,
p. 7-15.

DESCRIPTORS: Formamides, Glycerol, *Acryloni-
triles, Synthetic fibers, Processing, Temperature,
Coagulation.

61-16525

Results were obtained for the influence of the coagu-
lating bath temperature on wet spinning of acryloni-
trile copolymers. The maximum spinning velocity in-
creased as the bath temperature increased and as the
extrusion parameter and solution viscosity decreased.
(Materials--Textiles, TT, v. 6, no. 9) (over)

Office of Technical Services

61-16524

Takahashi, Masao and Watanabe, Masamoto.
RELATIONS BETWEEN VARIOUS SPINNING CONDI-
TIONS AND MECHANICAL PROPERTIES OF DRAWN
FILAMENTS OBTAINED BY THE WET-SPINNING OF
DIMETHYL FORMAMIDE-GLYCERIN SYSTEM. Rept.
no. 9 of Studies on Acrylic Fiber. [1961] 9p.
Order from SLA \$1.10

61-16524

Trans. of Sen-i Gakkaishi (Japan) 1960, v. 16, no. 1,
p. 15-20.

DESCRIPTORS: Formamides, Methyl radicals, Glyc-
erols, *Synthetic fibers, Mechanical properties, Tex-
tiles, *Acrylic resins, Polymers, Processing.

The relations between various spinning conditions and
the strength and elongation of the drawn yarns and their
photomicrographs, by wet-spinning of the continuous
spinning and drawing system, using DMF as solvent and
(Materials--Textiles, TT, v. 6, no. 9) (over)

- I. Title: Spinning
- I. Takahashi, M.
- II. Watanabe, M.

165385

Office of Technical Services

Dry Spinning. 1. Investigations of Spinning
Conditions, by M. Takahashi, M. Watanabe,
23 pp.

JAPANESE, per, Sen-i Gakkaishi, Vol XVI,
No 6, 1960, pp 458-469.

ATS-00045J

HTC/ST-2921

203,556

Sci

Jul 62
Vol 4, No 12

PB-

61-25015

- I. RIS C-141
- II. Research Information Service, New York

DRAWING OF POLYVINYL CHLORIDE (PVC) POLYMERIZED AT LOW TEMPERATURES, PTS. I-II
[1961] 15p. 21 refs.
Order from RIS \$50.00

RIS C-141

Trans. from Sen-i Gakkaishi (Japan) 1960, v. 16,
no. 10.

DESCRIPTORS: *Polymers, Vinyl radicals, Chlorides,
*Synthetic fibers, Temperature, Processing,
Mechanical properties.

176703

Office of Technical Services

(Materials--Textiles, TT, v. 6, no. 6)

61-22191

THE PHENOMENON OF MUTUAL DIFFUSION OF AN
 H_2SO_4 - $NaOH$ SYSTEM IN FIBERS (AND) THE PHE-
NOMENON OF MUTUAL DIFFUSION IN A CYLIN-
DER. Pts. 1-2 of Studies in the Wet Spinning Process
of Artificial Fibers. [1961] 14p. 1 ref.
Order from RIS \$45.00 RIS C-140

Trans. from [Sci-I Gakkaishi] (Japan) 1960, v. 16,
no. 10.

1. Synthetic fibers--
Processing
2. Diffusion--Analysis
3. Cellulose--Processing
4. Sodium hydroxides--
Diffusion
5. Sulfuric acid--Diffusion
- I. Title: Phenomenon...
- II. Title: Studies...
- III. RIS C-140
- IV. Research Information
Service, New York

152093

Office of Technical Services

(Materials--Textiles, TT, v. 5, no. 12)

Hada, Buel.
PREPARATION OF ACRYLONITRILE-ALLYLALCOHOL
COPOLYMERIC FIBER BY γ -RAY INDUCED COPOLY-
MERIZATION. Oct 62, 14p. 8 refs.
Order from SA \$18.00 SA Code-S110

Trans. in manuscript of Sen-i Gakkaishi (Japan) 1960,
v. 16, no. 10, p. 810-812.

DESCRIPTORS: *Synthetic fibers, Preparation,
*Acrylonitriles, Allyl radicals, Alcohols, Copolymeri-
zation, Gamma rays, *Radiation effects, Mechanical
properties, Dyes.

(Materials--Textiles, TT, v. 8, no. 12)

62-34475

I. Hada, B.
II. SA Code-S110
III. Seizaburo Aoki (Japan)

Office of Technical Services

Drawing of Polyvinylchloride Polymerized
at Low Temperature, by M. Asahina et al.
Parts 1 and 2.
JAPANESE, per, Sen-i-Gakkaishi, Vol 16, 1960,
pp 813-821.
NASA TT F-9769

U. S. GOVERNMENT USE ONLY

Sci-~~Japan~~ Chem
Apr 66

296,728

Studies on Resin Distribution (at Resin Finishing
of the Fabric) Using A Radioisotope. Report No. I.
On the Fundamental Conditions of Macroautoradio-
graphy., by S. Yokoyama and Y. Onti.
JAPANESE, per, San-i Gakkaishi, Vol 16, No 12,
1960, pp 1050-1053.
NTC 71-14588-11E

Feb 72

Studies on Resin Distribution (at Resin Finishing
of the Fabric) Using a Radioisotope. Report No. 2.
On the Effects of Predrying Conditions on
Resin Distribution, by S. Yokoyama and Y. Oni.
JAPANESE, per, Sen-i Gakkaishi, Vol 16, No 12,
1960, pp 1053-1055.
NTC 71-14589-11E

Feb 72

Yasuda, T.
SPINNING QUALITIES OF METHYL ACRYLATE
COPOLYMERS. Pt. I of Studies on Synthetic Fibers
Produced from Acrylonitrile. [1961] 6p.
Order from ATS \$12.00 ATS-94N51J

Trans. of Sen-i Gakkaishi (Japan) 1961, v. 17, no. 1,
p. 27-30.

DESCRIPTORS: *Acrylonitriles, Copolymerization,
*Synthetic fibers, Mechanical properties, Acrylic
resins, Textiles.

61-22407

- I. Yasuda, T.
- II. ATS-94N51J
- III. Associated Technical
Services, Inc., East
Orange, N. J.
- IV. Title: Studies...

ATS-JJ-3099

1961

Microscopical Observations on 6-Nylon Filaments
Undergoing Photodegradation, by K. Kato.

JAPANESE, per, Sen-i Gakkaishi, Vol XVII, No 2,
1961, pp 139-143.

NIL M 8842

Sci - Phys
Mar 63

~~224,290~~
224,290

Takahashi, Masao.
FILAMENT FORMATION IN A SOLVENT-WATER
TYPE COAGULATION BATH [AND] SOME ASPECTS
OF THE SPINNABILITY IN A SPINNING BATH
HAVING THE CRITICAL COMPOSITION. Repts. 20-21
on Studies of Acrylic Fibers. [1961] 14p.
Order from ATS \$19. 40

ATS-79N53]

Trans. of Sen-i Gakkaishi (Japan) 1961, v. 17, no. 3,
p. 243-252.

DESCRIPTORS: *Synthetic fibers, Production,
Coagulation.

(Materials--Textiles, TT, v. 6, no. 9)

61-25334

- I. Takahashi, M.
- II. Title: Some...
- III. Title: Studies
- IV. ATS-79N53]
- V. Associated Technical
Services, Inc., East
Orange, N. J.

ATC/TT-772

185565

Office of Technical Services

Kawakami, H. and Kawashima, K.
PREPARATION OF SYNTHETIC FIBERS FROM
MIXTURES OF POLYVINYL ALCOHOL AND VINYL
METHYL ETHER-MALEIC ACID COPOLYMERS.
Pt. 1 of Studies on the Preparation of Synthetic Fibers
from Mixtures of Polyvinyl Alcohol and Other Water-
Soluble Polymers. [1961] 8p.
Order from ATS \$12.20

ATS-76N57]

Trans. of Sen-i Gakkaishi (Japan) 1961, v. 17,
p. 325-329.

DESCRIPTORS: *Synthetic fibers, Fibers, *Vinyl
radicals, Alcohols, *Polymers, Methyl radicals,
Ethers, *Maleic acid, Copolymerization.

(Chemistry--Organic, TT, v. 7, no. 6)

62-12354

- I. Kawakami, H.
- II. Kawashima, K.
- III. Title: Studies ...
- IV. ATS-76N57]
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

ATS-76-3063

Office of Technical Services

Studies on Hard Twisted Yarns. Part VII.
Construction of Twisted Yarns of
Continuous Filament Bundles Consisting
of Fibers of Different Deniers, by
S. Kakiage.

JAPANESE, per, Sen-i-Gakkaishi, Vol 17,
No 5, 1961, pp 368-373.
NTC 72-10606-112

Apr 72

Imoto, Akijoshi, and Yoshikawa, Sebei.
EFFECT OF HEAT TREATMENT ON POLY-
ETHYLENE TEREPHTHALATE. Study on Heat Treat-
ment of Polyethylene Terephthalate. 102 p. (figs.,
charts, 15 refs.)
Tokyo: Japan Textile Co.
SA Code-S265

Journal of Textile Science (Japan), 1971, v. 17, no. 19,
p. 101-107.

English. English. *Textile fibers. *Polyesters. Polymers.
Heat treatment. Physical properties. Molecular
structure. Phys. abs. Endpapers.

(Materials--Textiles, TT, v. 8, no. 12)

02-34462

- I. Sakai, A.
- II. Yoshikawa, S.
- III. Yano, Seiya.
- IV. SA Code-S265
- V. Waraburo Yoko (Japan)

Office of Technical Services

Oya, Seigo, Yasuda, Akira, and Nakai, Akiyoshi.
SOME RESULTS ON DRAFT. Rept. 1 of Melt Spinning
of Polypropylene. Oct 62, 14p. (figs. omitted) 8 refs.
Order from SA \$18.00

Trans. of Soc. of Chokkaishi (Japan) 1961, v. 17, no. 11,
p. 1088-1093.

DESCRIPTORS: *Synthetic fibers. *Propylene. Drawn.
(Machine processing). Velocity. Tensile properties.
Optics.

(Materials--Textiles, TF, v. 6, no. 12)

Fundamental Studies on the Spinning of
Cellulose Acetate. III. The Viscosity of
the Concentrated Solution of Cellulose
Acetate (Part 1), by H. Konishi.
JAPANESE, par, Sen-i Gakkaishi, Vol 18,
1962, pp 38-42.
Chem Trans Sv 3100

326, 103

Sci - Chemistry
May 67

Fundamental Studies on the Spinning of
Cellulose Acetate. IV. Viscosity of
Concentrated Cellulose Acetate Solution
(Part 2), by H. Kikuchi.
JAPANESE, per, Sani-Gakkaishi, Vol 18, 1962,
pp 42-45.
Chem Trans Sv 3101

326,404

Sci - Chemistry
May 67

Identification of Textile Fibres and the
Detection of Mixed Fibres by Infra Red
Absorption Spectra, by H. Sobue,
S. Fukuhara.

JAPANESE, per, Sen-i Gakkaishi, Vol XVIII,
No 2, 1962, pp 121-129.

GB/256/T.1419

NEL/500001

Sci- A/M

342,032

Aug 63

Studies on Oxidation of Cellulose by
Ceric Salt and Graft Polymerization,
by Iwao Terasaki, Mitsue Matsuki.
JAPANESE, per, Sen-i Gakkaishi, Vol 18,
1962, pp 147-152.
TC-998

Sci-Chem
Aug 66

309,207

63-12626

Uda, K.
VISCOSITY STUDIES OF CELLULOSE ACETATE
SOLUTIONS. PT. 4: VISCOSITY OF CONCENTRATED
CELLULOSE TRIACETATE SOLUTIONS. [1962] 8p.
Order from ATS \$10.50 ATS-12P66]

Trans. of Seika Gakkaisha (Japan) 1962, v. 18, no. 3,
p. 236-240.

DESCRIPTORS: *Cellulose acetates, Solutions,
Viscosity.

(Materials--Plastics, TT, v. 9, no. 7)

- I. Uda, K.
- II. Title: Viscosity . . .
- III. ATS-12P66]
- IV. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Saito, H., Uchi, K., and Abe, H.
VISCOSITY STUDIES OF CELLULOSE ACETATE
SOLUTIONS. PT. EFFECT OF SOLVENTS AND THE
DEGREE OF ACETYLATION ON THE VISCOSITY OF
CONCENTRATED CELLULOSE ACETATE SOLUTIONS.
[1962] 6p.

Order from ATS \$8.31

ATS-13P66

Trans. of Seisaku Gakkaishi (Japan) 1962, v. 18, no. 3,
p. 240-242.

DESCRIPTORS: *Cellulose acetates, Solutions,
Viscosity, Organic solvents, Acetylation.

(Materials-Plastics, TT, v. 9, no. 7)

63-12617

- I. Saito, H.
- II. Uchi, K.
- III. Abe, H.
- IV. Title Effect . . .
- V. ATS-13P66
- VI. Associated Technical
Services, Inc., East
Orange, N. J.

Office of Technical Services

Katayama, A., Kuroki, N., and Konishi, K.
EFFECT OF UNIVALENT INORGANIC ANIONS ON
THE DYING OF VINYLON. [1963] 8p.
Order from ATS \$13.75 ATS-34Q68J

Trans. of Sen-i Gakkaishi (Japan) 1962, v. 18, no. 4,
p. 356-360.

DESCRIPTORS: Inorganic compounds, *Ions, *Dyes,
Fibers (Synthetic), *Vinyl plastics.

(Materials--Textiles, TT, v. 10, no. 1)

63-17165

- I. Katayama, A.
- II. Kuroki, N.
- III. Konishi, K.
- IV. ATS-34Q68J
- V. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Koshimo, A. and Shimoyama, T.
A STUDY OF THE MECHANISM OF DYEING NYLON
6 FIBERS WITH ACID DYES. [Jan 64] 6p
Order from ATS \$9.75 ATS-94Q73]

Trans. of Seimi Gakkaishi (Japan) 1963, v. 19,
p. 369-372.

DESCRIPTORS: Dyes, Acids, *Fibers (Synthetic),
*Nylon, *Dyeing.

(Materials--Textiles, TT, v. 11, no. 10)

TT-64-12426

- I. Koshimo, A.
1. Shimoyama, T.
- III. ATS-94Q73]
- IV. Associated Technical
Services, Inc.,
East Orange, N. J.

Office of Technical Services

Corrosion of Atmospheric Crude Distillation
Towers in Oil Refineries in Japan: Rept. From
Committee on Corrosion Prevention,
JAPANESE, per, Sekiyu Gakkai Shi, Vol V,
1962, No 8, pp 578-581.
ATS 37R76j

Apr 67 322,999

Effect of Univalent Inorganic Anions on the Dyeing
of Vinyon, by A. Katayama.
JAPANESE, per, Sen-i Gakkaishi, Vol 18, No 4, 1962,
pp 356-360.
ATS-JS-308

June 72

2

Studies on the Dyeing Properties of Acrylic
Fibers I. The Effects of Thermal Treatments of
Acrylic Fibers on the Dyeing Property and
Uniform Dyeing, by Akira Takaoka, 18pp
JAPANESE, per, Sen-i Gakkaishi, Vol 18, 1962,
No 8, pp 741-748
SIA TT-64-18491

Sci - Mat
June 67

327,475

v
Viscoelasticity and Spinnability of High
Polymers: the Case of Melt Spinning in
Particular, by K Kanamawru.
JAPANESE, per, Sen'i Gakkaishi, Vol. XIX,
No 3, 1963, pp 230-242.
ATS 22R78j

ATS-13.310

Apr 67

323,119

Studies on the Dry Spinning of Acetate Fibers, nos.
1 and 2, by T. Kamiya, K. Hirokawa.
JAPANESE, per, Sen'I Gakkaishi, No. 1, 1961,
pp 449-453 - 464
GD 121

Sci -
Eng 67

036,604

Viscoelasticity and Spinnability of High Polymers;
The Case of Melt Spinning, in Particular, by
K. Kanamaru.
JAPANESE, per, Sen-i Gakkaishi, Vol 19, No 3, 1963,
pp 230-242.
ATS-JS-310

June 72

An Automatic Vibroscope. Part I. Principle, Design,
and Operation, by K. Wakayama.
JAPANESE, per, Sen-i Kikai Gakkai Chi, Vol 17, No 2,
1964, pp 126-132.
ATS-JS-306

June 72

A Study of the Mechanism of Dyeing Nylon 6 Fibers
With Acid Dyes, By A. Koshimo.
JAPANESE, per, Sen-i Gakkaishi, Vol 19, 1963,
pp 369-372,
ATS-JS-309

June 72

Studies on the Thermal Retraction Behavior of
Heat-treated Polyethylene Terephthalate Fibers.
Part I. The Temperature Dependence of the Thermal
Contractions at Equilibrium, by I. Kuriyama,
T. Kawai.
JAPANESE, per, Seni-i-Gakkai Shi, Vol 20, No 4,
1964, pp 215-222.
NTC 69-11459-11E

Sci-Mat
July 69

387,129

Vapour Phase Grafting of Vinyl Monomers
onto Rayon by Cerium Initiator,
by Kimihiro Suzuki, Ichiro Kido.
JAPANESE, per, Sen i Gakkaishi, Vol 20,
No 5, 1964, pp 311-318.
TC-999

Sci-Chem
Jul 66

307, 524

Studies on the Thermal Retraction Behavior of
Heat-treated Polyethylene Terephthalate Fibers.
Part II. Longitudinal Changes During the Sub-
sequent Heating Process, by I. Kuriyama,
K. Shirakashi.
JAPANESE, per, Seni-i-Gakkai Sai, Vol 20, No 6,
1964, pp 347-355.
NTC 69-11458-11E

Sci-Mat

Spectroscopic Studies on Interaction Between
Direct Dyes and Nonionic Surfactants,
JAPANESE, Per, Sen-i Gakkaishi, Vol XX,
No 10, 1964, pp 662-665.
ATE JS-102

sci-methods * Equip
Apr 67

324,601

Studies on the Thermal Properties of Hot Drawn
P.E.T. Fibers. Report No. VII. Load Dependence
on Dimensional Change in Successive Heating and
Cooling Processes Under Constant Rate, by
I. Kuriyama
JAPANESE, per, Sen-i Gakkaishi, Vol 20, No 11,
1964, pp 695-704
NTC 71-16831-11E

Feb 72

Effects of Swelling Agent on the Thermal Properties of Warm-Drawn P.E.T. Fiber. Part 1. Dependence on the Concentration of the Swelling Agent, for Dimensional Changes at a Constant Temperature, by I. Kuriyama.

JAPANESE, per, Sen-i-Gakkaishi, Vol 20, 1964, pp 705-710.

NTC 72-10385-11E

Apr 72

Agency: Floating Arsenal
Inq. 35-700

R-10090-D
2 Oct. 69

Title: Studies on Viet Dyeing. pp. 778 - 783. Opp

Source: SEM-I Gakkaishi. Vol. 20, No. 12 (1964).

Language: Japanese.

Special Instructions: Please translate & type 1 copy only.

Author: Sakido, MINORU Minoru and Etsu-ichi Matsui.

62-20094

Tada, Yoshitero.
CREMONA "MANRYO" VINYLON FISH NETS AND
ROPES. [1962] [17]p.
Order from SLA \$1.60

62-20094

Trans. of Sen-i Kai [sic] 1957, v. 16, no. 174,
p. 64-68.

DESCRIPTORS: *Fibers (Synthetic), *Vinyl plastics,
Fishes, *Nets, Cordage, Mechanical properties.

Cremona "Manryo" and Cremona "Manryo No. 5"
which are Vinylon products, and fishing nets and ropes
prepared from them are discussed briefly, their
properties and uses are described. It may be pre-
dicted that cotton and Manila hemp will be completely
replaced by the synthetic fibers in the future, and that
cotton and hemp will no longer be used in the fishing
industry. This use of synthetic fibers is advantageous
(Materials--Textiles, TT, v. 10, no. 2) (over)

1. Tada, Y.

Office of Technical Services

Studies on Crepe Yarn. I. Structure of Single
Filaments in Twisted Multifilament Yarn, by
S. Iachage.

JAPANESE, per, Sen i ikui okunishi, cl. 11,
1958, pp 317-321.
N.L. 5828.4: (5940)

Sci-Stat
Jul 68

361,662

Stuffer-Box Crimping of Slivers, by H. Sasaki.

JAPANESE, per, Sen-i Kikai Gakkai Shu, Vol XIV,
No 149, 1961, pp 61-66.

GB/256/T.1507

Sci-Misc

Aug 63

342,030

NCH-202 498

Field 11E, 13I

Knouki, A.
THEORETICAL STUDY OF SPINNERET HOLE ARRANGE-
MENTS. 1965, 12p. TC-1144.
Order from TC: \$10.00 as TC-1144

Trans. of Sen'i Kikai Gakkaiishi (Japan) v14 p518-24 1961.

I. Trans-Chem
Knoxville, Tenn.

Zyo, Y[oshio] and Murase, R[yochi].
SPINNING OF ACETATE FIBERS WITH TETRA-
METHYLENE BISETHYLENE UREA ADDED. Pt. 7 in
Study of Bridge-Forming Reaction of Cellulose Fibers.
[1961] [23]p. 3 refs.
Order from SLA \$2.60

61-16778

Trans. of Sen'i Kogyo Shikensho Iho (Japan) 1958,
no. 45, p. 87-98.

DESCRIPTORS: *Cellulose acetates, Synthetic fibers,
Chemical bonds, Processing, Urea derivatives, Chemi-
cal reactions.

For the purpose of obtaining acetate fibers containing
uniform bridge bonds, a bridge-forming agent was added
to the spinning bath and spinning experiments were con-
ducted. Some tests were also made on the changes in
the form of the fibers produced in the spinning process
and into some physical properties of the fibers obtained.
Tetramethylene bisethyle urea was added, as bridge-
(Materials--Textiles, TT, v. 6, no. 5) (over)

61-16778

- I. Title: Spinning
- I. Zyo, Y.
- II. Murase, R.
- III. Title: Study...

180510

Office of Technical Services

Zyo, Yoshio and Murase, Ryotchi.
SPINNING OF ACETATE FIBERS WITH THIONO-
PHOSPHORIC TRIETHYLENE IMIDE ADDITIVE.
Pt. 8 on Study of Bridge-Forming Reaction of Cellulose
Fibers. [1961] [13]p. 2 refs.
Order from SLA \$1.60

61-16777

Trans. of Sen'i Kogyo Shikensho Iho (Japan) 1958,
no. 45, p. 99-105.

DESCRIPTORS: *Cellulose acetates, Synthetic fibers,
Processing, Chemical bonds, Physical properties,
Imides, Chemical reactions.

By adding to the spinning bath for cellulose acetate the
acetone-soluble ethylene imine derivative, thionophos-
phoric triethylene imide, as bridge-forming agent,
spinning, and then heat treating, a uniform bridge-for-
mation among the molecules was attained. The fiber
showed an increase of about 50% in strength. The
strength-elongation curve and the elasticity properties
(Materials--Textiles, TT, v. 6, no. 5) (over)

61-16777

- I. Title: Spinning
- I. Zyo, Y.
- II. Murase, R.
- III. Title: Study ...

180509

Office of Technical Services

63-10683

Hasegawa, Masaki.

SYNTHESIS OF HIGH POLYMERIC SUBSTANCE FROM

LIGNIN. [1962] 9p. 5 refs.

Order from SLA \$1.10

63-10683

I. Hasegawa, M.

Trans. of [Sen'i Kogyo Shikensho Iho] (Japan) 1959,
no. 48, p. 1-6.DESCRIPTORS: *Lignin, Wood, Wood pulp, *Polymers,
*Synthesis, *Aldehydes, Chemical reactions.

The purpose of the present study lies in the synthesis of
bifunctional compounds from vanillin or vanillic acid
and epichlorohydrin and the synthesis of high polymeric
substances from the said compounds as a phase of the
research into the utilization of vanillin which is
obtained in large quantities from the pulp waste liquor.
From the reaction, several kinds of new compounds
which can be utilized for high polymeric substances
(Chemistry--Organic, TT, v. 10, no. 3) (over)

Office of Technical Services

Kanetsuna, Hisaaki.
ON THE METHOD FOR MEASURING THE AMOUNT
OF PHENOL ABSORPTION OF 6 NYLON. Rept. no. 1.
[Pt. 9 of the Studies on the Fine Structure of 6 Nylon by
Phenol Absorption. [1961] 8p. (2 figs. 1 table omitted)
4 refs.
Order from SLA \$1.10

62-10718

Trans. of [Sen'i Kogyo Shikensho Iho] (Japan) 1959,
no. 49, p. 65-68.

DESCRIPTORS: Synthetic fibers. *Nylon. *Phenols.
Absorption.

(Materials--Textiles, TT, v. 7, no. 9)

62-10718

I. Kanetsuna, H.
II. Title: Studies ...

Office of Technical Services

Kanetsuna, Hisaaki.

ON THE SWELLING OF 6 NYLON IN AQUEOUS PHENOL SOLUTION AND THE BEHAVIOR OF PHENOL ABSORPTION. Rept. no. 2 [Pt. 9]. of the Studies on the Fine Structure of 6 Nylon by Phenol Absorption. [1961] 14p. (6 figs. omitted) 5 refs.

Order from SLA \$1.60

62-10716

Trans. of [Sen'i Kogyo Shikensho Iho] (Japan) [1959] no. 49, p. 69-76.

DESCRIPTORS: *Synthetic fibers, *Nylon, Physical properties, Crystallization, *Phenols, Absorption.

Tests showed that most of the increase in the amount of the fiber swelling which takes place in an aqueous solution of phenol is due to the absorption of phenol. The amount of water which is absorbed is extremely small. The absorption heat of phenol on the 6-nylon: (Materials--Textiles, TT, v. 9, no. 6) (over)

62-10716

I. Kanetsuna, H.
11. Title: Studies ...

Office of Technical Services